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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,978	06/09/2005	Herbert Meyerle	S118.12-0005	1345
27367 7590 09/30/2009 WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402				
EXAMINER KLEIN, GABRIEL J				
ART UNIT 3641		PAPER NUMBER		
MAIL DATE 09/30/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/537,978

Applicant(s)

MEYERLE, HERBERT

Examiner

GABRIEL J. KLEIN

Art Unit

3641

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 12-27, 29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) 29 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 12-27 is/are rejected.
- 7) ☒ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I, claims 1-9 and 12-27 in the reply filed on June 26, 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Thus, claims 29 and 31 are withdrawn from further consideration, and the remainder of the instant Office Action is directed to claims 1-9 and 12-27.

Claim Objections

Claim 26 is objected to because of the following informalities: Applicant states on lines 3-4 "...a device for the firing of a cartridge for firearms, wherein the apparatus is arranged within the cartridge, said apparatus comprising..."

However, it is the opinion of the examiner that Applicant meant to state: "...a device for the firing of a cartridge for firearms, wherein the **device** is arranged within the cartridge, said **device** comprising..." since this language is what is supported by the disclosure as a whole, and since the language as currently presented doesn't make sense. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the firearm" in lines 4 and 5. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether Applicant intends to claim a firearm or not. Thus, the metes and bounds of the claims are not definite.

In reference to claim 16, Applicant claims: "...wherein such attacks lead to a permanent destruction of the capability to fire the cartridge." It is not understood what Applicant is intending to claim with this language. Specifically, the claim is confusing since it depends from claim 15 which sets forth the limitation that the apparatus is protected against attacks. If the apparatus as claimed is protected against attacks (in claim 15) then how do such attacks lead to permanent destruction of the capability to fire the cartridge? It is the examiner's understanding that the capability to fire a cartridge is the primary function of the apparatus, and thus destruction of this capability would mean that the apparatus was not protected against whatever attack caused such destruction. Applicant's claim 16 clearly contradicts the claim which it depends from, and therefore it is not possible to determine what Applicant is intending to claim.

In reference to claim 17, Applicant claims "An apparatus for releasing a cartridge according to claim 1, wherein the apparatus is arranged within the firearm..." This portion of claim 17 contradicts claim 1, since claim 1 clearly sets forth that the apparatus is arranged within the cartridge (claim 1, lines 1-2). Thus, in reference to claims 17-25, it is unclear what Applicant is intending to claim since Applicant sets forth "...the

apparatus..." multiple times throughout the claims without clearly stating which apparatus. It is the opinion of the examiner that Applicant intends for claim 17 to claim that the "apparatus arranged within the firearm" (from claim 1) comprises: "an operating device calculating releasing data, and a cartridge interface for receiving identification data from the cartridge and for transmitting the releasing data to the cartridge". This interpretation is supported by the disclosure as a whole, and will be the interpretation considered for purposes of examination. It is noted that claims 18-25 use the term "the apparatus" without specifying which apparatus (the one in the cartridge or the one in the firearm?). However, it is the opinion of the examiner that Applicant intends for the "the apparatus" mentioned in claims 18-25 to be "the apparatus arranged within the firearm" since this is what is supported by the disclosure as a whole. It is noted that it is Applicant's responsibility to correct for the ambiguity of the language found in claims 17-25 by clarifying which apparatus Applicant is intending to further limit.

Claim 26 recites the limitation "the firearm" in lines 6, 8, and 15. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether Applicant intends to claim a firearm or not. Thus, the metes and bounds of the claims are not definite.

Claim 27 recites the limitation "the firearm" in lines 7 and 8. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether Applicant intends to claim a firearm or not. Thus, the metes and bounds of the claims are not definite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 and 12-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brosow (6760992) in view of Miles (6283034).

In reference to claims 1 and 27, Brosow discloses an apparatus for the firing of a cartridge for firearms, wherein the apparatus is arranged within the cartridge, the apparatus comprising:

- an interface capable of transmitting an identification stored in the cartridge to an apparatus which is arranged within the firearm (paragraph bridging columns 6-7; paragraph bridging columns 7-8; and column 8, lines 11-14), and capable of receiving electric energy transmitted from said apparatus arranged within the firearm (column 6, lines 54-63).

Thus, Brosow discloses the claimed invention except for (1) wherein the electric energy received by said apparatus arranged within the firearm includes data, (2) a control means for comparing a password stored in the cartridge with the received data, and (3) a security means which is only releasable by a signal transmitted from the control means if the stored password and the received data match. In fact, Brosow does not provide much detail regarding the circuit (element 104) arranged within the cartridge or the electric energy signal transmitted by the apparatus arranged within the

firearm and received by said circuit to activate firing of said cartridge. Based upon the limited disclosure of Brosow with regard to the circuit 104 and the signal it receives for firing of the cartridge, it seems that the cartridge could be fired simply by applying an electrical energy signal of sufficient magnitude. This would mean that the cartridge of Brosow could potentially be fired by an unauthorized person, since said person would only have to apply an electric energy signal to the contact at the rear of the cartridge (not necessarily using the firearm of Brosow). Clearly, this is a security issue associated with the Brosow design, and it should be appreciated that a person of ordinary skill in the art would be motivated to address this issue in order to disallow unauthorized firing of the Brosow cartridge by simple application of electric energy.

Fortunately, Miles teaches that it is known to provide a cartridge with a circuit arranged within the breech end of said cartridge (same location as the circuit of Brosow), said circuit capable of receiving data (column 5, lines 35-63; and column 7, lines 14-43) and including (1) a control means for comparing a password stored in the cartridge with the received data (elements 32 and 33) and (2) a security means (element 30) which is only releasable by a signal transmitted from the control means if the stored password and the received data match (column 7, lines 14-67). Thus, it would have been obvious to a person of ordinary skill in the art to modify the apparatus arranged with the cartridge and the apparatus arranged within the firearm, as taught by Brosow, such that the apparatus arranged within the cartridge includes (1) a control means for comparing a password stored in the cartridge with data received from the apparatus arranged within the firearm and (2) a security means which is only releasable

by a signal transmitted from the control means if the stored password and the received data match, as taught by Miles, in order to prevent unauthorized firing of the cartridge. It should be appreciated that such a modification would merely require that the circuit 104 of Brosow be replaced by a circuit such as that taught by Miles (set forth above) and that the apparatus arranged within the firearm, as taught by Brosow, be modified to transmit a coded signal, in lieu of the general "electrical energy signal", as taught by Miles. It should be appreciated that such modifications could be made readily using known methods (taught by Miles) in a manner that would yield predictable results to those having ordinary skill in the art. Specifically, the function of the Brosow firearm and cartridge would remain unchanged except that the electric energy signal transmitted to the cartridge, upon proper verification (Brosow; column 7, line 50, to column 8, line 10), would be modified to include data which would be verified by the substitute circuit (circuit substitution set forth above). Thus, the modified cartridge would no longer pose a security risk since it would only be capable of firing upon receiving the correct data and not just any electric energy signal. Lastly, it should be appreciated that both references teach similar electrically activated firing transducers, and thus modifying the cartridge of Brosow to include a circuit according to Miles would not effect how the cartridge is ultimately fired subsequent to password verification.

In reference to claim 2, Brosow in view of Miles teaches that the security means is an energy barrier (Miles, element 30).

In reference to claim 3, Brosow in view of Miles teaches that the apparatus within the cartridge comprises a firing transducer (both references teach this).

In reference to claim 4, Brosow in view of Miles teaches that the firing transducer effects a firing of the cartridge depending on a firing energy supplied over the interface (set forth above; also Miles, column 9, lines 5-11).

In reference to claims 5-6, 8-9, and 13-14 Brosow in view of Miles teaches the claimed invention as set forth above.

In reference to claim 7, Brosow in view of Miles inherently teach the claimed invention. It should be appreciated that the firing transducer is a structural element, and that any structural element may be inherently permanently inactivated by an outer impact provided the magnitude of said impact is high enough. There are no indestructible structures.

In reference to claim 12, Brosow in view of Miles teaches that at least the data used for comparing cannot be read from the memory in an unauthorized manner (Miles, column 7, lines 14-49).

In reference to claims 15-16, Brosow in view of Miles inherently disclose that the apparatus is protected against at least mechanical attacks since the apparatus is contained within a cartridge and thus protected to some degree by this containment. It can also be said that the apparatus is protected against electrical attacks since the cartridge will not fire if electrical energy not including the releasing data is applied to said cartridge.

In reference to claim 17, Brosow in view of Miles teaches that the apparatus which is arranged within the firearm includes an operating device which decides whether or not to transmit releasing data to the cartridge (Brosow, element 15); a

cartridge interface capable of receiving identification data from the cartridge (Brosow, column 7, lines 1-6) and for transmitting the releasing data to the cartridge (set forth above).

In reference to claims 18-25, Brosow in view of Miles discloses the claimed invention (Brosow, figure 2b, element 206 which represents the apparatus arranged within the firearm; and Brosow, column 7, lines 1-63). It should be appreciated that the firing impulse generator can be considered whatever portion of the operating device transmits the releasing data since this data ultimately causes the cartridge to be fired.

In reference to claim 26, Brosow in view of Miles teaches the claimed invention as set forth in the rejections of claims 1, 17, and 27 above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GABRIEL J. KLEIN whose telephone number is (571)272-8229. The examiner can normally be reached on Monday through Friday 7:15 am to 3:45 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Carone/
Supervisory Patent Examiner, Art Unit 3641

GJK